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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WANG, SHENGJUN	

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/985,974	BRIONI ET AL.	
	Examiner	Art Unit	
	Shengjun Wang	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6,8,9,11,12,14-23,25-27 and 29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6,8,9,11,12,14-23,25-27 and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 28, 2004 has been entered.

Claim Rejections 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 4-6, 8, 15-23, 25-27, and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed methods are directed to a method of treating sexual dysfunction by administering a (selective) dopamine D4 agonist. There is lack of written description as to the selective dopamine D4 agonist other than those particular compounds listed in the claims 11 and 12. The application provides neither the material structure of the supposed nuclear hormone receptor, no written description of their utilities for treating sexual dysfunction; Attention is directed to *General Electric Company v. Wabash Appliance Corporation et al* 37 USPQ 466 (US 1938), at 469, speaking to functional language at the point of novelty as herein employed: the vice of a functional claim exists not only when a claims is

wholly functional, if that is ever true, but when the inventor is painstaking when he recites what has already been seen, and then uses conveniently functional language at the exact point of novelty. Functional language at the point of novelty, as herein employed by Applicants, is further admonished in *University of California v. Eli Lilly and Co.* 43 USPQ2d 1398 (CAFC 1997) at 1406: stating this usage does little more than outlin[e] goals appellants hope the recited invention achieves and the problems the invention will hopefully ameliorate. Applicants functional language at the point of novelty fails to meet the requirements set forth under 35 USC 112, first or second paragraph. Claims employing functional language at the point of novelty, such as Applicants, neither provide those elements required to practice the inventions, nor inform the public during the life of the patent of the limits of the monopoly asserted *General Electric Company v. Wabash Appliance Corporation et* supra, at 468.

The application does not define the genus of "dopamine D4 agonist" or "selective dopamine D4 agonists" by structure, or by structure in conjunction with specific functional characteristics. The particular examples herein are distinct each from the others in their chemical structures. One of skilled artisan would not be able to envision the other ""dopamine D4 agonist" or "selective dopamine D4 agonists" which would be useful in the claimed invention. The instant specification fails to provide descriptive information, such as definitive structural or function features of the claimed genus of "dopamine D4 agonist" or "selective dopamine D4 agonists" that would distinguish the claimed "dopamine D4 agonist" or "selective dopamine D4 agonists" from other molecules with the similar properties. Since the disclosure fails to describe the common contributes or characteristics that identify members of the genus, and because the genus is highly variant, the disclosure of certain "dopamine D4 agonist" or "selective dopamine D4

agonists" is insufficient to describe the genus. *Vas-Cath Inc. v. Mahurkar,* 19 USPQ 2d 1111, clearly states "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purpose of the 'written description' inquiry, whatever is now claimed." (see page 1117). The specification does not "clearly allow person of ordinary skill in the art to recognize that [he or she] invented what is claimed." (see Vas-Cath at page 1116). By reading the specification herein, the skilled artisan cannot envision the detailed chemical structure of the encompassed genus of dopamine D4 agonists, particularly, those selective dopamine agonists as defined in claims 15-23. Applicants' attention is further directed to *University of Rochester v. G.D. Searle & Co.* 69 USPQ2d 1886 (CA FC 2004), wherein the court found the employment of selective COX-2 inhibitors lacks proper written description. Recognizing the unpredictability of the pharmaceutical art, the court stated: "Even with the three-dimensional structure of enzymes such as COX-1 and COX-2 in hand, it may even now not be within the ordinary skill in the art to predict what compounds might bind to and inhibit them, …."

1. Claims 1-2, 4-6, 8, 15-23, 25-27, and 29 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the particular compounds listed in claims 11 and 12, does not reasonably provide enablement for other compounds which are dopamine D4 agonists, particularly, those meet the requirements set forth in claims 15-23. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The instant specification fails to provide information that would allow the skilled artisan to practice the instant invention without undue experimentation. Attention is directed to In re

Wands, 8 USPQ 2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factor to consider when assessing if a disclosure would have required undue experimentation. The court recited eight factors:

1) the quantity of experimentation necessary,

2) the amount of direction or guidance provided,

3) the presence of absence of working examples,

4) the nature of the invention,

5) the state of the prior art,

6) the relative skill of those in the art,

7) the predictability of the art, and

8) the breadth of the claims.

In the instant case, the claims are directed to the employment of any dopamine agonists, particularly, those selective dopamine D4 agonists as set forth in claims 15-23. While there are known dopamine D4 agonists, the common contributes or characteristics that identify members of the genus are not known. The skilled artisan could not predict if a compound is a dopamine D4 agonist. Further, the skilled artisan could not determine if a compound is a selective dopamine D4 agonist without a try and fails process. Applicants fail to provide information allowing skilled artisan to ascertain these compounds without undue experimentation. In the instant case, only a limited number of selective dopamine D4 agonist examples are set forth, thereby failing to provide sufficient working examples. It is noted that these examples are neither exhaustive, nor define the class of compounds required. The pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed of physiological activity. The instant

claims read on all dopamine D4 agonist antagonists, or selective dopamine D4 antagonist", necessitating an exhaustive search for the embodiments suitable to practice the claimed invention, absent undue experimentation.

Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4-6, 8, 9, 11, 12, 14-23, 25-27, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fliri et al. (WO 0099/09025) and Glass et al (IDS) in view of Fliri et al. (US 5,883,094), and Faraci et al. (US 5,889,010), and in further view of El-Rashkly et al. (US patent 5,770,606).

3. Fliri et al (WO 99/09025) teaches indole derivatives, including CP-266,269, as dopamine D4 agonist. See, particularly, page 1, page 4, and pages 13-14. Glass et al. teaches that N-[[4-(2-cyanophenyl)-1-piperazinyl]methyl]-3-methyl benzamide is a known selective D4 receptor agonist, see particularly, table 1, compound 6. Fliri et al. further teaches method of using dopamine D4 receptor selective compounds for treating various dopamine related disorders. See, particularly, page 4, line 30 to page 5, line 10.

4. The primary references do not teach expressly the employment of dopamine D4 agonist for treating sexual dysfunction.

5. However, Fliri et al. (US 5,883,094) and Faraci et al. teaches that it is known in the art that dopamine receptors are important for many functions in the animal body, such function including sexual behavior, and suggest that D4 dopamine receptor selective compounds may exert a wide range of therapeutical effect. See, particularly, column 1 in both references. Fliri et al. and Faraci et al. further teach that compounds having selective D4 dopaminergic activity are known to be useful for treating sexual dysfunction. See, particularly, column 3-5, 10-11 and the claims in Fliri et al. and column 6, line 62 to column 9, line 60, column 20, line 35 to column 22, line 55 in Faraci et al. Further, El-Rashidy et al teaches that dopamine agonist particularly known to be useful for treating sexual dysfunction. See, particularly, the abstract, col. 3, lines 18-55.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to employ D4 receptor agonists, such as those disclosed by Fliri et al.(WO 99/09025) and Glass et al. for treating sexual dysfunctions

A person of ordinary skill in the art would have been motivated to employ D4 receptor agonists, such as those disclosed by Fliri et al.(WO 99/09025) and Glass et al. for treating sexual dysfunctions because dopamine receptors are generally known to be related to sexual behavior, and, compounds having selective D4 dopaminergic activity are particularly known to be useful for treating sexual dysfunction.

Response to the Arguments

Applicants' amendemnts and remarks submitted December 28, 2004 have been fully considered, but are not persuasive.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Taking the cited references as a whole, the claimed invention, using a known dopamine D4 agonist for treating sexual dysfunction would have been obvious to one of ordinary skill in the art.

Applicants further contend that Fliri et al. and Faraci et al. do not teach or suggestion the treatment of sexual dysfunction because these references do not provide any working examples for treating sexual dysfunction. The arguments are not persuasive. Both references expressly identify the treatment of sexual dysfunctions. See, particularly, column 3-5, 10-11 and the claims in Fliri et al. and column 6, line 62 to column 9, line 60, column 20, line 35 to column 22, line 55 in Faraci et al. Further, note question under 35 U.S.C. 103 is not merely what reference expressly teach, but what they would have suggested to one of ordinary skill in the art at the time the invention was made; all disclosures of prior art, including unpreferred embodiments, must considered. In re Lamberti and Konort (CCPA), 192 USPQ 278. Fliri et al. and Faraci et al. teach that dopamine receptors are associated with sexual dysfunctions.

Applicants further contend an unexpected result residing in the claimed invention. Regarding the establishment of unexpected results, a few notable principles are well settled. It is applicant's burden to explain any proffered data and establish how any results therein should be taken to be unexpected and significant. See MPEP 716.02 (b). The claims must be commensurate in the scope with any evidence of unexpected results. See MPEP 716.02 (d). Further, A DECLARATION UNDER 37 CFR 1.132 must compare the claimed subject matter with the closest prior art in order to be effective to rebut a prima facie case if obviousness. See, MPEP 716.02 (e).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHENGJUN WANG
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